



UNITED STATES PATENT AND TRADEMARK OFFICE

17

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,873	09/16/2003	Jacey Robert Beaucage	HSJ920030185US1	3112

48583 7590 01/18/2005

BRACEWELL & PATTERSON, LLP
PO BOX 61389
HOUSTON, TX 77208-1389

EXAMINER

RACHUBA, MAURINA T

ART UNIT	PAPER NUMBER
----------	--------------

3723

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary**Application No.**

10/663,873

Applicant(s)

BEAUCAGE ET AL.

Examiner

M Rachuba

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2004.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 16, 19 and 22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 13, 19 and 22 is/are allowed.
 6) ☒ Claim(s) 1, 2, 7-9, 11, 12 and 16 is/are rejected.
 7) ☒ Claim(s) 3-6 and 10 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 10/27/04.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 depends from canceled claim 15. The scope cannot be determined.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 2, 8, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birang et al, US005743784A in view of Gitis et al US006257953B1. '784 discloses a system for predicting the lapping property of a lapping plate, the system having a rotatable platform, a lapping plate **14** mounted on the platform and having an axial center, a holder **50** having a specimen **48** mounted on it and having an axial center, the holder positioned on the lapping plate, the holder being undriven but free to rotate about the axial center of the holder relative to the lapping plate, a fixture **34** positioned adjacent to the lapping plate, the fixture having a stationary base, an arm mounted to and extending away from the base towards the lapping plate and a guide feature **36** mounted to the arm for contacting and supporting the holder in a single radial and angular position with respect to the axial center of the lapping plate, and friction

Art Unit: 3723

detection means 52 mounted to the fixture for measuring frictional force between the lapping plate and specimen. Note that the use of abrasive slurry "charges" the lapping plate with abrasive. Note that the specimen is a wafer. The examiner takes Official notice that sliders are fabricated from semiconductor wafer material, as demonstrated by Hennenfent et al, 4,536,992, column 1, lines 54-66. '784 does not disclose a distance sensor mounted to the holder for detecting a gap distance between the distance sensor and the lapping plate. '953, column 6 lines 54-column 7 lines 55 teaches the use of distance sensors to measure the gap between the lapping plate and the sensor, by measuring the thickness of the workpiece between the plate and sensor. It would have been obvious to one of ordinary skill to have provided '784 with the distance sensor in combination with a friction sensor as taught by '953, column 6, lines 54-column 7, lines 55, to provide a more accurate determination of the condition of the lapping plate and to determine a process endpoint.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Birang et al, '784 in view of Gitis et al, '953 as applied to claim 1 above, and further in view of Cote et al, '155. '784 as modified by '953 does not disclose the specimen comprising a plurality of specimens symmetrically spaced apart about the distance sensor. '953 does teach that the distance sensors may be placed symmetrically about the head. '155, in a similar device, teaches the efficiency of processing a plurality of specimens simultaneously. It would have been obvious to one of ordinary skill to have provided '784 as modified by '953 with a plurality of specimens as taught by '155, abstract, to provide a more economical process.

Allowable Subject Matter

6. Claims 13, 19 and 22 are allowed.
7. Claims 3-6 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claim 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to claims 1, 2, 7-9, 11 and 12 have been considered but are moot in view of the new ground(s) of rejection. Applicant's amendments have overcome the previous rejections.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3723

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is **(571) 272-4493**.

The examiner can normally be reached on Monday-Thursday from 8:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail, can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Rachuba
Primary Patent Examiner

Handwritten signature of M. Rachuba and the date 1/12/05.